



**6560-50-P**

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[EPA-R04-OAR-2013-0389; FRL-9905-58-Region 4]**

**Approval and Promulgation of Implementation Plans; South Carolina; Regional Haze  
State Implementation Plan**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing approval of a revision to the South Carolina State Implementation Plan (SIP) submitted by the State of South Carolina through the South Carolina Department of Health and Environmental Control (SC DHEC) on December 28, 2012. South Carolina's December 28, 2012, SIP revision ("progress report SIP") addresses requirements of the Clean Air Act (CAA or "the Act") and EPA's rules that require states to submit periodic reports describing progress towards reasonable progress goals (RPGs) established for regional haze and a determination of the adequacy of the State's existing SIP addressing regional haze ("regional haze SIP"). EPA is proposing approval of South Carolina's progress report SIP on the basis that it addresses the progress report and adequacy determination requirements for the first implementation period for regional haze.

**DATES:** Comments must be received on or before [insert date 30 days after publication in the Federal Register].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R04-OAR-2013-0389 by one of the following methods:

1. [www.regulations.gov](http://www.regulations.gov): Follow the on-line instructions for submitting comments.
2. E-mail: [R4-RDS@epa.gov](mailto:R4-RDS@epa.gov).
3. Fax: (404) 562-9019.
4. Mail: EPA-R04-OAR-2013-0389, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960.
5. Hand Delivery or Courier: Ms. Lynorae Benjamin, Chief, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding federal holidays.

*Instructions:* Direct your comments to Docket ID No. "EPA-R04-OAR-2013-0389." EPA's policy is that all comments received will be included in the public docket without change and may be made available online at [www.regulations.gov](http://www.regulations.gov), including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit

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*Docket:* All documents in the electronic docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the

person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Michele Notarianni, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Michele Notarianni can be reached at telephone number (404) 562-9031 and by electronic mail at [notarianni.michele@epa.gov](mailto:notarianni.michele@epa.gov).

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## **I. What is the Background for EPA’s Proposed Action?**

States are required to submit a progress report in the form of a SIP revision every five years that evaluates progress towards the RPGs for each mandatory Class I Federal area within the state and in each mandatory Class I Federal area outside the state which may be affected by emissions from within the state. 40 CFR 51.308(g). States are also required to submit, at the same time as the progress report, a determination of the adequacy of the state’s existing regional haze SIP. 40 CFR 51.308(h). The first progress report SIP is due five years after submittal of the initial regional haze SIP. On December 17, 2007, SC DHEC submitted the State’s first regional haze SIP in accordance with 40 CFR 51.308(b).<sup>1</sup>

On December 28, 2012, SC DHEC submitted, in the form of a revision to South Carolina’s SIP, a report on progress made in the first implementation period towards RPGs for Class I areas in the State and Class I areas outside the State that are affected by emissions from South Carolina’s sources. This progress report SIP and accompanying cover letter also included a determination that the State’s existing regional haze SIP requires no substantive revision to achieve the established regional haze visibility improvement and emissions reduction goals for 2018. EPA is proposing to approve South Carolina’s progress report SIP on the basis that it satisfies the requirements of 40 CFR 51.308(g) and 51.308(h).

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<sup>1</sup> On June 28, 2012, EPA finalized a limited approval of South Carolina’s December 17, 2007, regional haze SIP to address the first implementation period for regional haze (77 FR 38509). In a separate action, published on June 7, 2012 (77 FR 33642), EPA finalized a limited disapproval of the South Carolina regional haze SIP because of the State’s reliance on the Clean Air Interstate Rule to meet certain regional haze requirements, which EPA replaced in August 2011 with the Cross-State Air Pollution Rule (CSAPR) (76 FR 48208 (Aug. 8, 2011)). In the aforementioned June 7, 2012, action, EPA finalized a Federal Implementation Plan (FIP) for South Carolina to replace the State’s reliance on CAIR with reliance on CSAPR. Following these EPA actions, the D.C. Circuit issued a decision in *EME Homer City Generation, L.P. v. EPA* (hereinafter referred to as “*EME Homer City*”), 696 F.3d 7 (D.C. Cir. 2012), *cert. granted* 570 U.S. \_\_\_ (June 24, 2013) (No. 12-1182) vacating CSAPR and keeping CAIR in place pending the promulgation of a valid replacement rule.

## **II. What are the Requirements for the Regional Haze Progress Report SIPs and Adequacy Determinations?**

### **A. Regional Haze Progress Report SIP**

Under 40 CFR 51.308(g), states must submit a regional haze progress report as a SIP revision every five years and must address, at a minimum, the seven elements found in 40 CFR 51.308(g). As described in further detail in section III below, 40 CFR 51.308(g) requires a description of the status of measures in the approved regional haze SIP; a summary of emissions reductions achieved; an assessment of visibility conditions for each Class I area in the state; an analysis of changes in emissions from sources and activities within the state; an assessment of any significant changes in anthropogenic emissions within or outside the state that have limited or impeded progress in Class I areas impacted by the state's sources; an assessment of the sufficiency of the approved regional haze SIP; and a review of the state's visibility monitoring strategy.

### **B. Adequacy Determinations of the Current Regional Haze SIP**

Under 40 CFR 51.308(h), states are required to submit, at the same time as the progress report SIP, a determination of the adequacy of their existing regional haze SIP and to take one of four possible actions based on information in the progress report. As described in further detail in section III below, 40 CFR 51.308(h) requires states to either: (1) submit a negative declaration to EPA that no further substantive revision to the state's existing regional haze SIP is

needed; (2) provide notification to EPA (and other state(s) that participated in the regional planning process) if the state determines that its existing regional haze SIP is or may be inadequate to ensure reasonable progress at one or more Class I areas due to emissions from sources in other state(s) that participated in the regional planning process, and collaborate with these other state(s) to develop additional strategies to address deficiencies; (3) provide notification with supporting information to EPA if the state determines that its existing regional haze SIP is or may be inadequate to ensure reasonable progress at one or more Class I areas due to emissions from sources in another country; or (4) revise its regional haze SIP to address deficiencies within one year if the state determines that its existing regional haze SIP is or may be inadequate to ensure reasonable progress in one or more Class I areas due to emissions from sources within the state.

### **III. What is EPA's Analysis of South Carolina's Regional Haze Progress Report and Adequacy Determination?**

On December 28, 2012, SC DHEC submitted a revision to South Carolina's regional haze SIP to address progress made towards RPGs of Class I areas in the State and Class I areas outside the State that are affected by emissions from South Carolina's sources. This progress report SIP also included a determination of the adequacy of the State's existing regional haze SIP. South Carolina has one Class I area within its borders: the Cape Romain Wilderness Area (Cape Romain). SC DHEC also identified, through an area of influence modeling analysis based on back trajectories, five Class I areas in two neighboring states potentially impacted by South Carolina sources: Wolf Island and Okefenokee Wilderness Areas in Georgia; and Joyce Kilmer,

Shining Rock, and Swanquarter Wilderness Areas in North Carolina. 77 FR 11911.

**A. Regional Haze Progress Report SIPs**

The following sections summarize: (1) each of the seven elements that must be addressed by the progress report under 40 CFR 51.308(g); (2) how South Carolina's progress report SIP addressed each element; and (3) EPA's analysis and proposed determination as to whether the State satisfied each element.

**1. 40 CFR 51.308(g)(1)**

40 CFR 51.308(g)(1) requires a description of the status of implementation of all measures included in the regional haze SIP for achieving RPGs for Class I areas both within and outside the state.

The State evaluated the status of all measures included in its 2007 regional haze SIP in accordance with 40 CFR 51.308(g)(1). Specifically, in its progress report SIP, South Carolina summarizes the status of the emissions reduction measures that were included in the final iteration of the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) regional haze emissions inventory and RPG modeling. The State also discusses the status of those measures that were not included in the final VISTAS emissions inventory and were not relied upon in the initial regional haze SIP to meet RPGs. The State notes that the emissions reductions from these measures, which are relied upon by South Carolina for reasonable



progress, will help ensure Class I areas impacted by South Carolina sources achieve their RPGs. The measures include applicable Federal programs (e.g., mobile source rules, Maximum Achievable Control Technology (MACT) standards, Federal and state consent agreements, and Federal and state control strategies for electric generating units (EGUs)). This summary includes a discussion of the benefits associated with each measure.

In instances where implementation of a measure did not occur on schedule, information is provided on the source category and the measure's relative impact on the overall future year emissions inventories. In aggregate, as noted in section III.A.2 and III.A.6 of this action, the emissions reductions from the identified measures are expected to result in lower emissions than originally projected in South Carolina's regional haze SIP. South Carolina states that it does not expect reasonable progress to be adversely impacted in any of the Class I areas in South Carolina or neighboring states by any of the changes to the emissions reductions projected.

EPA proposes to find that South Carolina's analysis adequately addresses 40 CFR 51.308(g)(1). The State documents the implementation status of measures from its regional haze SIP in addition to describing additional measures not originally accounted for in the final VISTAS emissions inventory used by the State that came into effect since the VISTAS analyses for the regional haze SIP were completed. South Carolina's progress report also describes significant measures resulting from EPA regulations other than the regional haze program as they pertain to the State's sources. The progress report SIP highlights the effect of several Federal control measures both nationally and in the VISTAS region, and when possible, in the

State. For example, the SIP provides a copy of the Federal consent decree with Santee Cooper, a South Carolina utility, and summarizes the emissions effects of this decree.<sup>2</sup>

The State's progress report discusses the status of key control measures that the State relied upon in the first implementation period to make reasonable progress. In its regional haze SIP, South Carolina identified sulfur dioxide (SO<sub>2</sub>) emissions from coal-fired EGUs as a key contributor to regional haze in the VISTAS region, with the EGU sector as a major contributor to visibility impairment at all Class I areas in the VISTAS region. The State's progress report SIP provides additional information on EGU control strategies and the status of existing and future expected controls for South Carolina's EGUs, with updated actual SO<sub>2</sub> emissions data for the years 2009 and 2011 reflecting reductions of SO<sub>2</sub> in 2009 and 2011. In its regional haze SIP, South Carolina determined that no additional controls of non-EGU sources were reasonable for the first implementation period.

Regarding the status of BART and reasonable progress control requirements for sources in the State, South Carolina's progress report SIP reviews the status of the State's 21 BART-eligible sources, including two sources - SCE&G-Williams and SCE&G-Wateree - found to be subject to BART. The progress report SIP indicates that flue gas desulfurization systems have been installed on these two BART-subject sources and are currently operating. Additionally, South Carolina summarized its reasonable progress control determinations from its regional haze SIP. Because the State found no additional controls to be reasonable for the first implementation

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<sup>2</sup> The consent decree required a reduction of 37,500 tpy of SO<sub>2</sub> from existing units by 2013, declining SO<sub>2</sub> emissions caps, and declining "system" SO<sub>2</sub> emissions rates.

period for sources evaluated for reasonable progress in South Carolina, no further discussion of the status of controls was necessary in the progress report SIP.

EPA proposes to conclude that South Carolina has adequately addressed the status of control measures in its regional haze SIP as required by 40 CFR 51.308(g)(1). The State describes the implementation status of measures from its regional haze SIP, including the status of control measures to meet BART and reasonable progress requirements, the status of significant measures resulting from EPA regulations and certain Federally-enforceable consent decrees, as well as measures that came into effect since the VISTAS analyses for the regional haze SIP were completed.

## **2. 40 CFR 51.308(g)(2)**

40 CFR 51.308(g)(2) requires a summary of the emissions reductions achieved in the state through the measures subject to 40 CFR 51.308(g)(1).

In its regional haze SIP and progress report SIP, South Carolina focuses its assessment on SO<sub>2</sub> emissions from EGUs because VISTAS determined that sulfate accounted for more than 70 percent of the visibility-impairing pollution in the Southeast and that SO<sub>2</sub> point source emissions in 2018 represent more than 95 percent of the total SO<sub>2</sub> emissions inventory.<sup>3</sup>

Overall, SO<sub>2</sub> emissions have decreased in South Carolina.<sup>4</sup> South Carolina states that the large reductions in SO<sub>2</sub> emissions from EGUs in the State resulted from many process and operational changes, including control installations, emissions units switching to cleaner fuels,

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<sup>3</sup> See section 7.7 of South Carolina's regional haze SIP narrative, page 79, for more detail.

<sup>4</sup> See also sections III.A.4 and III.A.6 of this action.

load shifting from higher emitting units to lower emitting units, and a temporary decrease in power generation in 2009. Using utility emissions data from 2002 through 2011 as reported to EPA by the utilities, South Carolina indicates that reductions in SO<sub>2</sub> emissions appear to be sustained through 2011, and notes that reductions in these emissions were achieved in 2010 and 2011, despite increased electricity generation by these EGUs between 2002 and 2011.

Between 2002 and 2011, heat input to these EGUs increased from approximately 418,577,515 million British thermal units (MMBtu) to 443,900,798 MMBtu. However, actual SO<sub>2</sub> emissions from these units decreased from 199,118 tons in 2002 to 66,166 tons in 2011, a 67 percent reduction. The average SO<sub>2</sub> emissions rate from these units also decreased from 0.95 lbs SO<sub>2</sub>/MMBtu in 2002 to 0.30 lbs SO<sub>2</sub>/MMBtu in 2011, a 69 percent reduction. According to the State, the reductions in emissions demonstrate that even with an increase in demand for power, as evidenced by the increased heat input to these units, a significant reduction in overall SO<sub>2</sub> emissions occurred due to the installation of controls and the use of cleaner burning fuels.

South Carolina states that a comparison of 2009 and 2011 data for these EGUs shows similar results. Emissions fell from 93,941 tons of SO<sub>2</sub> in 2009 to 66,166 tons of SO<sub>2</sub> in 2011, and the emissions rate dropped from 0.46 lbs SO<sub>2</sub>/MMBtu to 0.30 lbs SO<sub>2</sub>/MMBtu. The State expects that the overall EGU emissions rate will continue to drop in 2012 due to the start-up of additional scrubbing capacity and fuel switching.

South Carolina also identifies specific additional EGU SO<sub>2</sub> emissions reductions not included in the VISTAS projections that are due to the installation of additional SO<sub>2</sub> controls,

planned or announced retirements, and conversion to natural gas. These additional reductions (estimated to be 60,065 tons per year of SO<sub>2</sub> emissions based on 2011 emissions) will further help to ensure that Cape Romain will achieve its RPGs for visibility improvement by 2018.

South Carolina also submitted data for the entire VISTAS region showing similar trends in SO<sub>2</sub> EGU emissions in the neighboring states that contribute to visibility impairment at Cape Romain. Because sulfates have been shown to be the predominant species of concern to visibility impairment at Cape Romain during the first round of regional haze planning and because SO<sub>2</sub> EGU emissions are trending downward, South Carolina concludes in its progress report that visibility improvements at Cape Romain should continue into the future from the reduced sulfate contribution even if heat input to these EGUs may increase.

EPA proposes to conclude that South Carolina has adequately addressed 40 CFR 51.308(g)(2). The State provides estimates, and where available, actual emissions reductions of SO<sub>2</sub> from EGUs in South Carolina that have occurred since the State submitted its regional haze SIP. The State appropriately focused on SO<sub>2</sub> emissions from its EGUs in its progress report SIP because the State had previously identified these emissions as the most significant contributors to visibility impairment at Cape Romain and those areas that South Carolina sources impact. Given the large SO<sub>2</sub> reductions at EGUs that have actually occurred, further analysis of SO<sub>2</sub> from other sources or other pollutants, such as nitrogen oxides (NO<sub>x</sub>), was ultimately unnecessary in this first implementation period. Also, in the corresponding section of the progress report SIP addressing 40 CFR 51.308(g)(1), the State provides estimates, and where available, actual emissions reductions for certain non-EGU control measures that were accounted for in the projected VISTAS emissions inventories for 2009 and 2018. Because no additional controls

were found to be reasonable for reasonable progress for the first implementation period for evaluated sources in South Carolina, EPA proposes to find that no further discussion of emissions reductions from controls was necessary in the progress report SIP.

**3. 40 CFR 51.308(g)(3)**

40 CFR 51.308(g)(3) requires that states with Class I areas provide the following information for the most impaired and least impaired days for each area, with values expressed in terms of five-year averages of these annual values:<sup>5</sup>

(i) current visibility conditions;

(ii) the difference between current visibility conditions and baseline visibility conditions;

and

(iii) the change in visibility impairment over the past five years.

The State provides figures with the latest supporting data available at the time that it developed the progress report SIP that address the three requirements of 40 CFR 51.308(g)(3) for Cape Romain. For the first regional haze SIPs, “baseline” conditions were represented by the 2000-2004 time period.<sup>6</sup> Baseline visibility conditions at Cape Romain are 26.5 deciviews (dv) for the most impaired (20-percent worst) days and 14.3 dv for the least impaired (20-percent best) days. Current visibility conditions (for the five-year period from 2005-2009) are 26.4 dv

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<sup>5</sup> The “most impaired days” and “least impaired days” in the regional haze rule refers to the average visibility impairment (measured in deciviews) for the twenty percent of monitored days in a calendar year with the highest and lowest amount of visibility impairment, respectively, averaged over a five-year period. 40 CFR 51.301.

<sup>6</sup> 64 FR 35730.

for the 20-percent worst days and 15.0 dv for the 20-percent best days. The difference between current visibility and baseline visibility conditions for the 20-percent worst days is 0.1 dv of improvement (i.e., 26.5 – 26.4 dv). The difference between current visibility and baseline visibility conditions for the 20-percent best days is 0.7 dv of degradation (i.e., 14.3 – 15.0 dv). South Carolina concludes that visibility on the most impaired days at Cape Romain has improved since 2000 and that visibility conditions for the most impaired days are on track to meet the 2018 RPGs for the affected time period, particularly in light of the downward trend in SO<sub>2</sub> emissions from the State's EGUs.

EPA proposes to conclude that South Carolina has adequately addressed 40 CFR 51.308(g)(3). The State provides the information regarding visibility conditions and changes necessary to meet the requirements of 40 CFR 51.308(g)(3). The progress report SIP includes current conditions based on the latest available Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring data for the years 2005-2009, the difference between current visibility conditions and baseline visibility conditions, and the change in visibility impairment over the most recent five-year period for which data were available at the time of progress report SIP development (i.e., 2005-2009).

#### **4. 40 CFR 51.308(g)(4)**

40 CFR 51.308(g)(4) requires an analysis tracking emissions changes of visibility-impairing pollutants from the state's sources by type or category over the past five years based on the most recent updated emissions inventory.

In its progress report SIP, South Carolina presents data from a statewide emissions inventory developed for the year 2007 and compares this data to three sets of data from its initial regional haze SIP: a baseline emissions inventory for 2002 and estimated emissions inventories for the future years of 2009 and 2018 (as updated and provided by VISTAS to the State in 2008).<sup>7</sup> The pollutants inventoried include volatile organic compounds, NO<sub>x</sub>, fine particulate matter, coarse particulate matter, ammonia, and SO<sub>2</sub>. The emissions inventories include the following source classifications: stationary point and area sources, off-road and on-road mobile sources, and biogenic sources. The comparison of emissions inventory data shows that emissions of the key visibility-impairing pollutant for the southeast, SO<sub>2</sub>, continued to drop from 2002 to 2007 (from 284,935 to 228,053 tons of SO<sub>2</sub>).

In addition, South Carolina augments the statewide 2007 actual emissions inventory data with more recent emissions data and control summary information for the years 2007 to 2011 for the EGU sector, which is the key source of SO<sub>2</sub> in the State. As discussed in section III.A.2 of this action, South Carolina documents changes in EGU emissions that already have occurred and changes to future emissions projections that are expected by 2018. South Carolina expects the overall EGU SO<sub>2</sub> emissions to continue to drop beyond the reductions projected in the State's regional haze SIP due to the installation of additional SO<sub>2</sub> emissions controls at EGUs and additional fuel switches not previously projected. As noted in section III.A.2 of this action,

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<sup>7</sup> VISTAS improved model performance for the 2002 base year emissions inventory used by South Carolina in its original regional haze SIP, resulting in updates to the 2002 inventory and the 2009 and 2018 projection inventories. VISTAS provided the final iteration of these inventories to the states in 2008. South Carolina used these updated data for the years 2002, 2009, and 2018 in its progress report.



South Carolina expects the overall EGU SO<sub>2</sub> emissions to continue to drop beyond the reductions projected in the State's regional haze SIP due to the installation of additional SO<sub>2</sub> emissions controls at EGUs and additional fuel switches not previously projected.

EPA proposes to conclude that South Carolina has adequately addressed 40 CFR 51.308(g)(4). While ideally the five-year period to be analyzed for emissions inventory changes is the time period since the current regional haze SIP was submitted, there is an inevitable time lag in developing and reporting complete emissions inventories once quality-assured emissions data becomes available. Therefore, EPA believes that there is some flexibility in the five-year time period that states can select. South Carolina tracked changes in emissions of visibility-impairing pollutants using an updated emissions inventory for 2007 that the State believes is more robust than the 2008 National Emissions Inventory pertaining to the State, the most recent updated inventory of actual emissions for the State at the time that it developed the progress report SIP. EPA believes that the State's use of the five-year period from 2002-2007 understates the actual reductions because substantial additional SO<sub>2</sub> emissions reductions are expected to occur from 2007-2012. South Carolina also analyzed trends in annual SO<sub>2</sub> emissions from EGUs in the State for 2002 – 2011, the most current quality-assured data available for these units at the time of progress report SIP development (see, e.g., Figure 3 and Table 9 of the progress report SIP).

**5. 40 CFR 51.308(g)(5)**

40 CFR 51.308(g)(5) requires an assessment of any significant changes in anthropogenic emissions within or outside the state that have occurred over the past five years that have limited

or impeded progress in reducing pollutant emissions and improving visibility in Class I areas impacted by the state's sources.

In its progress report SIP, South Carolina states that sulfates continue to be the biggest single contributor to regional haze at Cape Romain. Accordingly, South Carolina first focused its analysis on addressing large SO<sub>2</sub> emissions from point sources. While there have been significant changes in the anthropogenic emissions from EGUs, South Carolina stated that these changes have not impeded progress in reducing emissions and improving visibility. Rather, the State concluded that the EGU controls already adopted or planned, coupled with planned shut downs or fuel conversions, will result in greater improvements in visibility than those originally projected in South Carolina's regional haze SIP for the first implementation period.

In addressing the requirements at 40 CFR 51.308(g)(5), South Carolina further examined other potential pollutants of concern affecting visibility at Cape Romain. After ammonium sulfate (64.1 percent), primary organic matter (POM) (14.4 percent) is the next largest contributor to visibility impairment at Cape Romain. To further examine spikes in POM monitoring data, the State conducted an analysis to determine potential contributors. This analysis indicated that fires reported within and/or outside the State appear to have contributed to visibility impairment on days exhibiting uncharacteristically high levels of POM.

EPA proposes to conclude that South Carolina has adequately addressed 40 CFR 51.308(g)(5). The State performed additional analyses to confirm its decision to focus on SO<sub>2</sub> emissions for reasonable progress for the remainder of the implementation period and

demonstrated that there are no significant changes in anthropogenic emissions of SO<sub>2</sub> that have impeded progress in reducing emissions and improving visibility in Class I areas impacted by South Carolina sources. The State referenced its analyses in the progress report SIP identifying an overall downward trend in these emissions from 2002 to 2011. Further, the progress report SIP shows that the State is on track to meeting its 2018 RPGs for Cape Romain.

**6. 40 CFR 51.308(g)(6)**

40 CFR 51.308(g)(6) requires an assessment of whether the current regional haze SIP is sufficient to enable the state, or other states, to meet the RPGs for Class I areas affected by emissions from the state.

In its progress report SIP, South Carolina states that it believes that the elements and strategies outlined in its original regional haze SIP are sufficient to enable South Carolina and other neighboring states to meet all the established RPGs. To support this conclusion, South Carolina notes that the actual 2011 EGU emissions of 66,131 tons of SO<sub>2</sub> are already below the 2018 projected emissions of 76,291 tons of SO<sub>2</sub>, with further decreases expected. South Carolina expects that the reduction of SO<sub>2</sub> emissions will in fact be even greater than originally anticipated in its regional haze SIP, particularly for the EGU sector as discussed in section III.A.6. of this action. In particular, the State notes that the emissions reductions already achieved in the 2007 to 2011 period and the additional reductions not accounted for in the original regional haze SIP (as discussed previously for purposes of 40 CFR 51.308(g)(1)) further support the State's conclusion that the regional haze SIP's elements and strategies are sufficient to meet the established RPGs.

In its regional haze SIP, South Carolina established a RPG for the 20-percent best days that would result in a 1.4 deciview reduction in visibility impairment to 12.7 dv. After South Carolina submitted its regional haze SIP on December 17, 2007, VISTAS made several modifications to the original emissions inventory to improve model performance and reassess the RPGs for the VISTAS states. The final model simulation of the updated/revised VISTAS emissions inventory results in a slight change in the calculation of the Cape Romain RPG for the 20-percent best days from 12.7 to 12.8 dv. South Carolina requests that EPA acknowledge this update to the RPG as a revision to the State's regional haze SIP. EPA proposes to approve this revised RPG for the 20-percent best days for Cape Romain because it reflects the updated VISTAS baseline inventory used to generate the RPGs incorporated into the regional haze SIPs for the other VISTAS states.

EPA proposes to conclude that South Carolina has adequately addressed 40 CFR 51.308(g)(6). EPA views this requirement as a qualitative assessment that should evaluate emissions and visibility trends and other readily available information, including expected emissions reductions associated with measures with compliance dates that have not yet become effective. The State referenced the improving visibility trends and the downward emissions trends in the State, with a focus on SO<sub>2</sub> emissions from South Carolina EGUs, that support the State's determination that the State's regional haze SIP is sufficient to meet RPGs for Class I areas within and outside the State impacted by South Carolina sources. In addition, because additional IMPROVE visibility data has become available since the State developed its progress

report SIP, EPA has also reviewed the most current data for Cape Romain for the years 2007-2011 from the IMPROVE monitoring network.<sup>8</sup> For the 2007-2011 time period, the visibility conditions for the 20-percent worst days are 24.6 dv and for the 20-percent best days are 14.1 dv. Using this latest available data, the visibility improvement from the baseline conditions is 1.9 dv for the 2007-2011 period on the 20-percent worst days and 0.2 dv on the 20-percent best days. Despite the degradation of 0.7 dv on the 20-percent best days at Cape Romain over the 2005-2009 period, identified in Section III.A.3 of this action, EPA believes that South Carolina's conclusion regarding the sufficiency of the regional haze SIP is appropriate because of the calculated visibility improvement using the latest available data and the downward trend in SO<sub>2</sub> emissions from EGUs in the State.

**7. 40 CFR 51.308(g)(7)**

40 CFR 51.308(g)(7) requires a review of the state's visibility monitoring strategy and an assessment of whether any modifications to the monitoring strategy are necessary. In its progress report SIP, South Carolina summarizes the existing monitoring network at Cape Romain and the State's intended continued reliance on the IMPROVE monitoring network for its visibility planning. South Carolina also expresses its continued commitment to operate monitors supporting regional haze investigations where appropriate and when support is available. South Carolina is also encouraging VISTAS and the other regional planning organizations to maintain support of the existing data management system or an equivalent to facilitate availability analysis of the IMPROVE and visibility-related data. South Carolina concludes that the existing network

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<sup>8</sup> This data is available at: <http://vista.cira.colostate.edu/tss/Results/HazePlanning.aspx>.

is adequate and that no modifications to the State's visibility monitoring strategy are necessary at this time.

EPA proposes to conclude that South Carolina has adequately addressed the sufficiency of its monitoring strategy as required by 40 CFR 51.308(g)(7). The State reaffirmed its continued reliance upon the IMPROVE monitoring network and discussed its additional continuous sulfate monitors and fine particulate matter network used to further understand visibility trends in the State. South Carolina also explained the importance of the IMPROVE monitoring network for tracking visibility trends at Cape Romain and identified no expected changes in this network. The State did note that certain special monitoring studies that VISTAS performed in South Carolina during 2002-2005 will not be continued due to lack of funds; however, the discontinuance of these additional, specialized studies do not affect the adequacy of the State's current monitoring strategy.

#### **B. Determination of Adequacy of Existing Regional Haze Plan**

Under 40 CFR 51.308(h), states are required to take one of four possible actions based on the information gathered and conclusions made in the progress report SIP. The following section summarizes: (1) the action taken by South Carolina under 40 CFR 51.308(h); (2) South Carolina's rationale for the selected action; and (3) EPA's analysis and proposed determination regarding the State's action.

In its progress report SIP, South Carolina took the action provided for by 40 CFR 51.308(h)(1), which allows a state to submit a negative declaration to EPA if the state determines that the existing regional haze SIP requires no further substantive revision at this time to achieve the RPGs for Class I areas affected by the state's sources. The basis for the State's negative declaration is the findings from the progress report (as discussed in section III.A of this action), including the findings that: visibility has improved at Cape Romain; SO<sub>2</sub> emissions from the State's sources have decreased beyond original projections; additional EGU control measures not relied upon in the State's regional haze SIP have occurred or will occur in the implementation period; and the SO<sub>2</sub> emissions from EGUs in South Carolina are already below the levels projected for 2018 in the regional haze SIP and are expected to continue to trend downward for the next five years, as will the SO<sub>2</sub> emissions from EGUs in the other VISTAS states. Based on these findings, EPA proposes to agree with South Carolina's conclusion under 40 CFR 51.308(h) that no further substantive changes to its regional haze SIP are required at this time.

#### **IV. What Action is EPA Proposing to Take?**

EPA is proposing approval of a revision to the South Carolina SIP, submitted by the State of South Carolina on December 28, 2012, as meeting the applicable regional haze requirements as set forth in 40 CFR 51.308(g) and 51.308(h).

#### **V. Statutory and Executive Order Reviews**

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR

52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);



- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, EPA has preliminarily determined that this proposed rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because there are no “substantial direct effects” on an Indian Tribe as a result of this action and because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it has preliminarily determined that it will not impose substantial direct costs on tribal governments or preempt tribal law. The Catawba Indian Nation and Reservation (Catawba Indian Nation) is located in Rock Hill, South Carolina. Pursuant to the Catawba Indian Claims Settlement Act, S.C. Code Ann. 27-16-120, “all state and local environmental laws and regulations apply to the Catawba Indian Nation and Reservation and are fully enforceable by all relevant state and local agencies and authorities.” Thus, the South Carolina SIP applies to the Catawba Reservation. On May 15, 2013, EPA offered consultation on South Carolina’s progress report SIP to the Catawba Indian Nation and that same day, the Catawba Indian Nation declined formal

consultation on South Carolina's progress report SIP.

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: January 7, 2014.

A. Stanley Meiburg,  
Acting Regional Administrator,  
Region 4.

[FR Doc. 2014-00940 Filed 01/16/2014 at 8:45 am; Publication Date: 01/17/2014]